5

10

15

18. The method as defined in claim 17 wherein the method further comprises the step of providing the Operating System that includes all components of a complete version, thereby including all security and memory management features.

- 19. The method as defined in claim 18 wherein the method further comprises the step of modifying or making additions to the Operating System in order to enable a network device to operate within the Open IP Services Platform.
- 20. The method as defined in claim 19 wherein the method further comprises the step of reducing the time required to configure the network topology, wherein the configuration software provides a graphical user interface that enables an administrator to drag and drop icons representing the network devices into the desired network topology.

20

21. The method as defined in claim 20 wherein the method further comprises the steps of:

15

20

5

- providing a plurality of pre-configured network topologies that are stored in memory;
- 2) selecting of the pre-configured network topologies; and
- 3) instruction the Open IP Services Platform to implement the network topology defined in the preconfigured network topology utilizing network devices installed in the Open IP Services Platform.
- 10 22. The method as defined in claim 20 wherein the method further comprises the step of reducing networking knowledge requirements of the administrator, to thereby facilitate rapid and easy deployment of the network topology.
  - 23. The method as defined in claim 22 wherein the method further comprises the step of enabling operation of the Open IP Services Platform in harsh environments that would otherwise preclude operation of the Open IP Services Platform by providing localized cooling for specific temperature sensitive components.

5

10

15

20

- 24. The method as defined in claim 9 wherein the method for providing an Open IP Services Platform is capable of performing various network functions according to the specific network components that are disposed therein, and according to a network topology selected for those network components, said method comprising the steps of:
- 1) providing a single board computer running an open architecture Operation System, at least two bus connectors coupled to the single board computer, and used for receiving cards that perform network functions, a switch/router board coupled to the single board computer, and a plurality of network ports coupled to the switch/router board;
- 2) coupling a first set of network devices to the at least two connector buses; and
- 3) configuring interconnections between the first set of network devices, the switch/router board, and the single board computer to thereby define a first network function and a first network topology for the Open IP Services Platform.